ANALYTIC SYSTEMS
INNOVATIVE POWER CONVERSION SOLUTIONS
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SolarMax Charge Controller

MPPT Battery Charger Model SMP-100

Benefits

- Ultra-Quiet, Efficient and Reliable
- MPPT solar power source for direct loads
- Get the most from your Solar Investment
- Allow for faster charge times
- Ensure years of safe and trouble free operation
- Allows higher voltage PV strings

Application

- Especially suitable for Off Grid
- Remote Locations
- Rugged Environments
- Government Applications
- Residential
- Industrial , Commercial Solar installations

US Patent No. 6,690,590

BCIT BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY A POLYTECHNIC INSTITUTION

Description

The Analytic Systems SolarMax Charge Controller brings the latest technology to your home or work with 200Voc Capacity. It uses an advanced MPPT (Maximum Power Point Tracking) algorithm which is up to 30% more efficient than a non MPPT charge controller standard battery charger, allowing you to maximize the energy harvested from your solar array. It also allows you to use a higher voltage PV array than the batteries you are charging as it is capable of stepping down the voltage, this allows greater flexibility in the choice of array for your system.

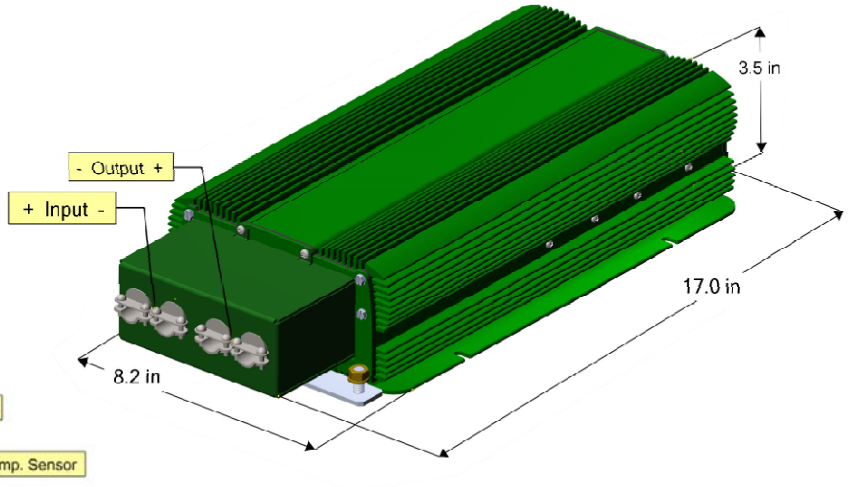
Features

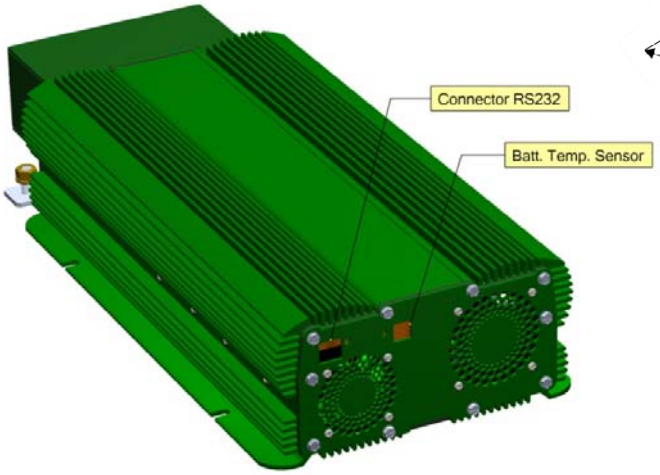
- ✓ MPPT Enabled (Maximum power Point Tracking)
- ✓ Adjustable 3-Stage Charging Algorithm-Lead Acid(PbA)
- ✓ Up to 200VOC Input
- ✓ Up to 100A Output Current
- ✓ Up to 97% Efficiency at 100A
- ✓ Input and Output Current Sensors
- ✓ Low Noise, EMC Tested
- ✓ Battery Temperature Sensor
- ✓ 24-72VDC nominal battery voltages (programmable through PC interface)
- ✓ Certification pending UL 1741, CE

SolarMax Charge Controller

Specification

Obs. Labels not shown.





Mechanical Specification

Depth	17 in/ 434 mm
Width	8.2 in/ 208 mm
Height	3.5 in/ 89 mm or 2U
Clearance	1 inch (25 mm) all around
Material	Anodized Marine Grade Aluminum
Finish	Green Anodized
Fastenings	All 18-8 Stainless Steel
Weight	17.0 lb / 7.7 kg
Connections	Four contact terminals, AWG 1/0 Maximum gage
Warranty	3 years, extendable

Electrical (Input)

PV Open Circuit Voltage (VOC) Max	200V
Input Range	20-200V
Input Amps (max)	100A
Input Fuse (MDA)	No Internal Fuse
Input Protection	Recommend 100A in-line input circuit breaker

Environmental Specification

Data Logging	PC Data logging software included
Operating Temperature Range	-25° to +55°C with derating over +50°C
Certifications/ Compliance	UL1741 and CSA107
Ruggedization Options	Call for options
Conduit Connections	4x1 inch conduit connections

Electrical (Output)

Output Range	24, 28, 36, 48, 60, 72 V nominal battery voltage
Output Current (Max)	100A
Output Power (Max)	10KW
Typical Output Power	3-9KW
Standby Power Consumption	3W Max
Efficiency	97%
Charge Type	3 Stage, Bulk, Absorption, Float
Supported Battery Chemistries	Lead Acid (PbA)
Output Voltage Regulation	User Programmable 24-100V
Battery Temperature Compensation	User Programmable (mV/ °C)
MPPT Enabled	Yes, Targets 5% of max power point
Status Display	RS232- PC Interface
Output Protection	No Internal Output Fuse Recommend 100A in-line output circuit breaker

Model SMP-100 Spec Rev 4.0
2011 May 25

Available From: July 2011

ANALYTIC SYSTEMS
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ISO 9001:2008 Certified Quality System